

Appl. No. 10/017,375  
Amdt. dated 6/22/06  
Reply to Office Action of 1/23/06

PATENT  
Docket: 010331

### REMARKS

Reconsideration and allowance of the above referenced application are respectfully requested.

Claims 1-6, as amended, remain in the application.

#### Claim Rejections – 35 USC § 103

Claims 1-6 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kay et al (U.S. Patent No. 5,703,881, hereinafter “Kay”) in view of Pickering et al. (U.S. Patent No. 6,738,457).

Applicants teach a technique for transmitting speech activity in a distributed voice recognition system. In the distributed voice recognition system, voice recognition tasks are distributed between a user device, i.e., the device into which the user speaks, and a remote speech processing device. Thus, less computationally intensive tasks such as voice activity detection and front-end feature extraction are performed at the user device, and more complex voice recognition tasks, such as word decoding, are handled at a remote speech recognition server with greater computing resources than the user device. Furthermore, voice activity detection information is sent from the user device prior to extracted features to reduce the system's overall latency.

Kay does not describe a distributed voice recognition system. The multi-subscriber unit 22 is not a “user device” with a microphone for receiving the user's speech signal and limited processing power, such as a mobile phone. Rather, it is large station connected to multiple user devices (subscriber units 26) and has sufficiently large processing capabilities to handle all speech processing tasks in speech processor 38. As described in the previous Amendment, the information from the voice activity detector (VAD) 56 in the multi-subscriber unit's speech processor 38 is not transmitted over the wireless air interface to the base station in FIG. 1, but rather is transmitted along PCM busses in the speech processor 38 in the multisubscriber unit itself (see FIG. 6A and col. 7, ll. 5-27).

Pickering is cited for allegedly teaching the transfer of parameters to a recognition device. However, Pickering does not teach performing limited voice recognition tasks at a user device either. Accordingly, it does not make up for the deficiency in the primary reference, Kay.

The claims have been amended to more clearly recite that the feature extraction and voice activity detection occur at a user device, i.e., the device including the microphone which receives

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the user's speech signal, and this information is transmitted wirelessly to a speech recognition device for further processing.

Neither Kay nor Pickering, either alone or in combination, teach or suggest performing feature extraction and voice activity detection at a user device and wireless transmission of such information to a speech recognition device. Accordingly, Applicant submits that Claims 1-6 are allowable.

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### CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: 6/22/06

By:   
Kenyon Jenckes, Reg. No. 41,873  
858-651-8149

QUALCOMM Incorporated  
Attn: Patent Department  
5775 Morehouse Drive  
San Diego, California 92121-1714  
Telephone: (858) 658-5787  
Facsimile: (858) 658-2502